

What we claim is:

- Sub 7
A2
1. An adhesive for a disposable absorbent article:
 - said disposable absorbent article comprising a wearing facing surface and a garment facing surface opposed thereto;
 - said adhesive covering at least a portion of said wearing facing surface;
 - said adhesive having an initial peel strength (P_I);
 - wherein said adhesive has a final peel strength (P_F) after exposure to water;
 - wherein the ratio of P_I to P_F is in the range of 2:1 to 2:4; and,
 - wherein said adhesive has a water absorption capacity of at least 3% by weight of said adhesive.

2. The adhesive of Claim 1, wherein said ratio of P_I to P_F ranges from 2:1.25 to 2:2.

3. The adhesive of Claim 1, wherein said initial peel strength (P_I) of said adhesive ranges from 0.1N/cm to 5.0N/cm.

4. The adhesive of Claim 3, wherein said initial peel strength (P_I) of said adhesive ranges from 0.5N/cm to 3.0N/cm.

5. The adhesive of Claim 1, wherein:

Sub B3

- said adhesive is provided as a layer having a thickness C ;
- wherein said adhesive has a viscous modulus at a temperature of 25°C ($G''_{25}(100 \text{ rad/sec})$); and,

wherein said viscous modulus ($G''_{25}(100 \text{ rad/sec})$) is defined by the equation:

$$G''_{25} \leq [(7.00 + C) \times 3000] \text{ Pa.}$$

- Sub A37
6. The adhesive of Claim 1, wherein:

said viscous modulus ($G''_{25}(100 \text{ rad/sec})$) is defined by the equation:

$$G''_{25} \leq [(5.50 + C) \times 1700] \text{ Pa.}$$

7. The adhesive of Claim 1, wherein:

said adhesive has an elastic modulus at a temperature of 37°C ($G'_{37}(1 \text{ rad/sec})$) and a viscous modulus at a temperature of 37°C ($G''_{37}(1 \text{ rad/sec})$);

wherein $G'_{37}(1 \text{ rad/sec})$ ranges from 500 Pa to 20000 Pa;

wherein $G''_{37}(1 \text{ rad/sec})$ ranges from 100 Pa to 15000 Pa; and,

wherein the ratio $G'_{37}(1 \text{ rad/sec}) / G''_{37}(1 \text{ rad/sec})$ ranges from 1 to 30.

8. The adhesive of Claim 7 wherein:

$G'_{37}(1 \text{ rad/sec})$ ranges from 700 Pa to 15000 Pa; and,

wherein $G''_{37}(1 \text{ rad/sec})$ ranges from 100 Pa to 10000 Pa.

9. The adhesive of Claim 8 wherein:

$G'_{37}(1 \text{ rad/sec})$ ranges from 1000 Pa to 10000 Pa; and,

wherein $G''_{37}(1 \text{ rad/sec})$ range from 300 Pa to 5000 Pa.

10. The adhesive of Claim 1, wherein said adhesive is a substantially water insoluble pressure sensitive adhesive comprising a polymer which forms a 3-dimensional matrix, and comprises less than 10% hydrocolloid particles by weight of said adhesive.

8-10 A 47 11. The adhesive of Claim 10, wherein said comprises less than 5% hydrocolloid particles by weight of said adhesive.

12. The adhesive of Claim 1, wherein said adhesive comprises:

a polymer selected from the group consisting of acrylics, sulphonated polymers,

SUB B4 vinyl alcohols, vinyl pyrrolidine, polyethylene oxide, and mixtures thereof; and,

a plasticizer selected from the group consisting of polyhydric alcohols, polyethylene glycols, sorbitol, water, and mixtures thereof.

13. The adhesive of Claim 12, wherein said adhesive is a hydrophilic-hydrophobic mixed phase adhesive.

14. The adhesive of Claim 1, wherein said wearer facing surface further comprises at least one non-adhesive portion.
15. The adhesive of Claim 1, wherein said adhesive is a continuous layer.
16. The adhesive of Claim 1, wherein said adhesive is applied to said wearer facing surface by slot coating.
17. The adhesive of Claim 1, wherein said article further comprises a release liner in contact with said adhesive.
18. The adhesive of Claim 1, wherein said article further comprises a topsheet in communication with said garment facing surface, a backsheet in communication with said topsheet, and an absorbent core disposed therebetween.
19. The adhesive of Claim 1, wherein said adhesive is applied to said wearing facing surface at a basis weight ranging from 20 g/m² to 2500 g/m².
20. The adhesive of Claim 19, wherein said adhesive is applied to said wearing facing surface at a basis weight ranging from 700 g/m² to 1500 g/m².

Add 7
A5